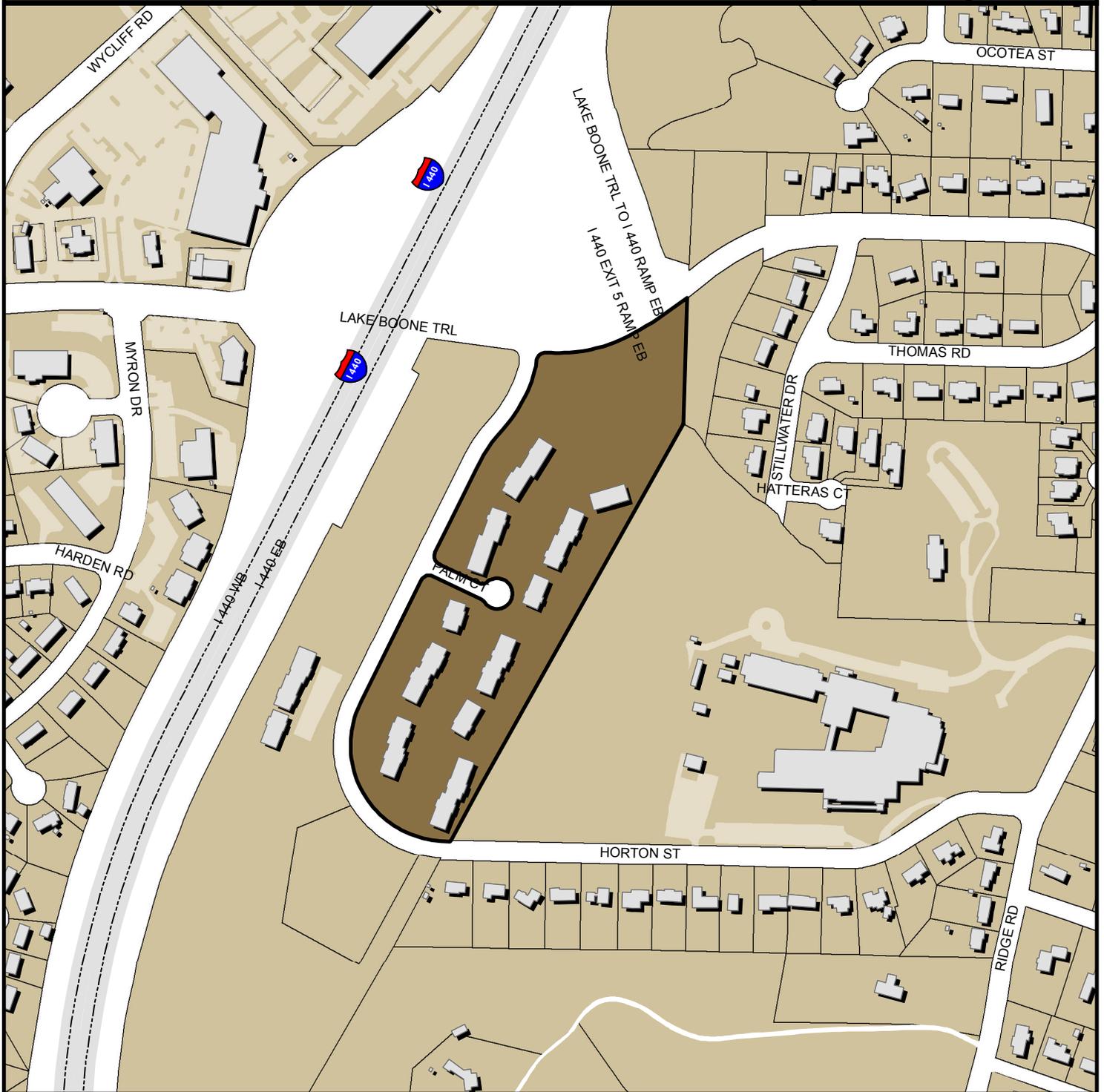


GREENWAY VILLAGE SUBDIVISION S-19-2014



Zoning: **CUD R-15**
CAC: **Glenwood**
Drainage Basin: **House**
Acreage: **15.34**
Number of Lots: **3**

Planner: **Stan Wingo**
Phone: **(919) 996-2642**
Applicant: **JDavis Architects**
Phone: **(919) 835-1500**





Planning & Development

~~XXXXXXXXXX~~
5-19-14

Development Services
Customer Service Center
One Exchange Plaza
1 Exchange Plaza, Suite 400
Raleigh, North Carolina 27601
Phone 919-996-2495
Fax 919-516-2685

Preliminary Development Plan Application

When submitting plans, please check appropriate review type and include the Plan Checklist document.

Preliminary Approvals		FOR OFFICE USE ONLY
<input type="checkbox"/> Site Plans for Planning Commission <input type="checkbox"/> Preliminary Administrative Site Plans <input type="checkbox"/> Group Housing ** <input type="checkbox"/> Multifamily (Infill)**	<input type="checkbox"/> Subdivision* <input checked="" type="checkbox"/> Cluster Subdivision** <input type="checkbox"/> Infill Subdivision** <input type="checkbox"/> Expedited Subdivision Review <input type="checkbox"/> Conventional Subdivision <input type="checkbox"/> Compact Development <input type="checkbox"/> Conservation Subdivision	Transaction Number 400072 Assigned Project Coordinator Assigned Team Leader
* May require Planning Commission or City Council Approval ** Legacy Districts Only		

Has your project previously been through the Due Diligence process? If yes, provide the transaction #

GENERAL INFORMATION

Development Name **Greenway Village Subdivision**

Proposed Use **Apartments**

Property Address(es) **3500 Horton Street, Raleigh, NC 27607**

Wake County Property Identification Number(s) for each parcel to which these guidelines will apply: **0795211105**

P.I.N. Recorded Deed DB 013187 p 2686	P.I.N. Recorded Deed	P.I.N. Recorded Deed	P.I.N. Recorded Deed
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What is your project type? Apartment Banks Elderly Facilities Hospitals Hotels/Motels Industrial Building
 Mixed Residential Non-Residential Condo Office Religious Institutions Residential Condo Retail School Shopping Center
 Single Family Telecommunication Tower Townhouse Other: If other, please describe:

PRELIMINARY ADMINISTRATIVE REVIEW
Per City Code Section 10-2132.2, summarize the reason(s) this plan can be reviewed administratively not requiring Planning Commission or City Council approval. **We are not aware of any reason that this plan cannot receive preliminary approval.**

PLANNING COMMISSION
Per City Code Section 10-2132.2, summarize the reason(s) this plan requires Planning Commission or City Council Preliminary Approval. **N/A**

CLIENT (Owner or Developer)	Company Grubb Ventures	Name (s) Anne Stoddard		
	Address 3700 Glenwood Avenue, Suite 510, Raleigh, NC 27612			
	Phone 919-786-9905	Email astoddard@grubbventures.com	Fax 919-786-9961	

CONSULTANT (Contact Person for Plans)	Company JDavis Architects	Name (s) David Brown		
	Address 510 Glenwood Ave, Ste 201, Raleigh, NC 27603			
	Phone 919-835-1500	Email davidb@jdavisarchitects.com	Fax 919-835-1510	

DEVELOPMENT TYPE & SITE DATA TABLE (Applicable to all developments)

Zoning Information	Building Information
Zoning District(s) CUD R-15	Proposed building use(s) FUTURE APARTMENTS
If more than one district, provide the acreage of each N/A	Existing Building(s) sq. ft. gross +/- 73,444 SF TO BE DEMOLISHED
Overlay District SHOD-1 (PORTION)	Proposed Building(s) sq. ft. gross TBD - SUBDIVISION ONLY
Total Site Acres 15.65 Inside City Limits <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Total sq. ft. gross (existing & proposed) TBD - SUBDIVISION ONLY
Off street parking Required N/A Provided N/A	Proposed height of building(s) TBD - SUBDIVISION ONLY
COA (Certificate of Appropriateness) case # N/A	FAR (floor area ratio percentage) TBD - SUBDIVISION ONLY
BOA (Board of Adjustment) case # A-	Building Lot Coverage percentage N/A (site plans only)
CUD (Conditional Use District) case # Z-	
Stormwater Information	
Existing Impervious Surface +5.2 acres/square feet <small>+1029,500</small> +/-226,500SF	Flood Hazard Area <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Proposed Impervious Surface acres/square feet TBD TBD SUBDIV ONLY	If Yes, please provide 3720079500J
Neuse River Buffer <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Wetlands <input type="checkbox"/> Yes <input type="checkbox"/> No	Alluvial Soils Flood Study FEMA Map Panel # 0795

CONFORMITY WITH THE COMPREHENSIVE PLAN (Applicable to all developments)

Provide a description of how your plan conforms to the guidelines of the Comprehensive Plan 2030.

The subject property is designated for "Moderate Density Residential" in the Future Land Use Map; the proposed subdivision does not create any conflict with that guideline.

FOR SUBDIVISION, APARTMENT, TOWNHOUSE, CONDOMINIUM PROJECTS ONLY

1. Total # Of Townhouse Lots Detached N/A Attached N/A	11. Total number of all lots 3
2. Total # Of Single Family Lots N/A	12. Is your project a cluster unit development? <input type="checkbox"/> Yes <input type="checkbox"/> No
3. Total # Of Apartment Or Condominium Units 234 DU	If Yes, please answer the questions below:
4. Total # Of Congregate Care Or Life Care Dwelling Units N/A	a) Total number of Townhouse Lots NONE
5. Total # Of Mobile Home Lots N/A	b) Total number of Single Family Lots NONE
6. Total Number of Hotel Units N/A	c) Total number of Group Housing Units 234
7. Overall Total # Of Dwelling Units (1-6 Above) 234	d) Total number of Open Space Lots 1
8. Bedroom Units 1br 144 2br 76 3br 14 4br or more N/a	e) Minimum Lot Size 2 ACRES
9. Overall Unit(s)/Acre Densities Per Zoning District(s) 15 DU/AC	f) Total Number of Phases 2
10. Total number of Open Space (only) lots N/A	g) Perimeter Protective Yard Provided <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	h) Must provide open space quotient per City Code 10-3071 (5) 291

SIGNATURE BLOCK (Applicable to all developments)

In filing this plan as the property owner(s), I/we do hereby agree and firmly bind ourselves, my/our heirs, executors, administrators, successors and assigns jointly and severally to construct all improvements and make all dedications as shown on this proposed subdivision plan as approved by the City.

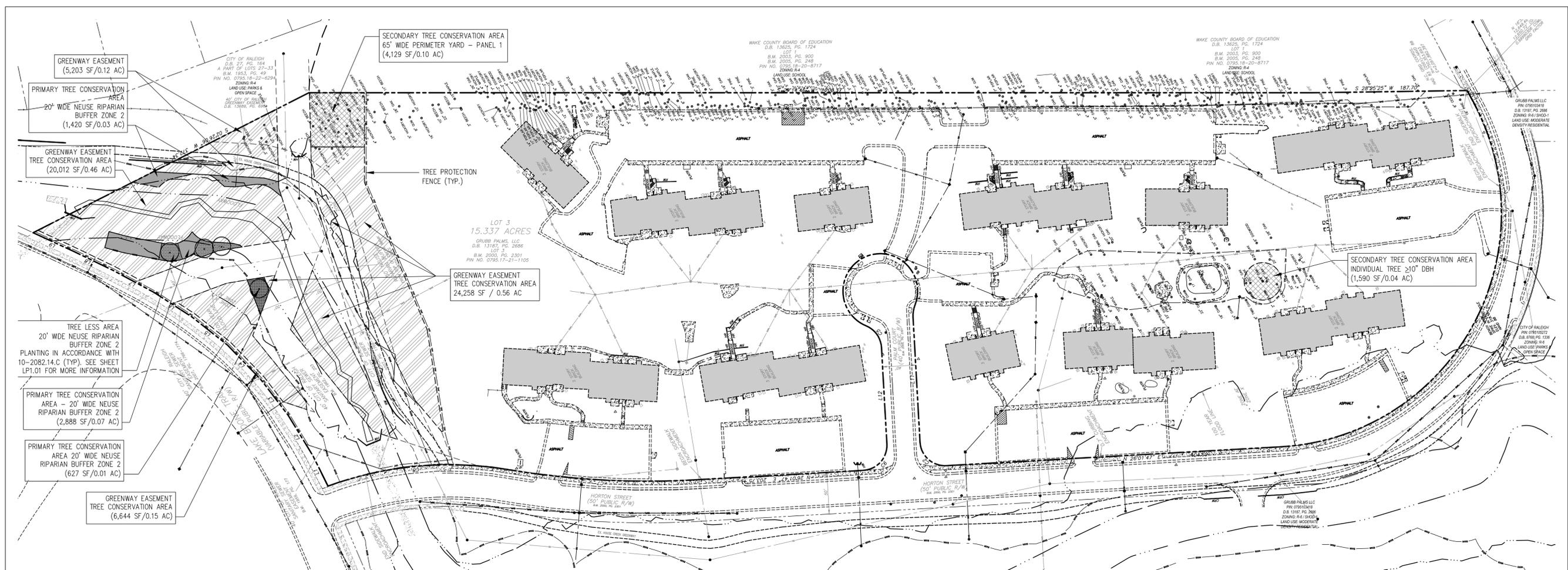
I hereby designate David Brown/JDavis Architects and Lotea Smith/Withers & Ravenel to serve as my agent regarding this application, to receive and respond to administrative comments, to resubmit plans on my behalf and to represent me in any public meeting regarding this application.

I/we have read, acknowledge and affirm that this project is conforming to all application requirements applicable with the proposed development use.

Signed R. Indur Date 6/17/2014
 Signed _____ Date _____

	TO BE COMPLETED BY APPLICANT		TO BE COMPLETED BY CITY STAFF		
	YES	N/A	YES	NO	N/A
General Requirements					
1. Filing Fee for Plan Review – Payments may be made by cash, Visa, Master Card or check made payable to: City of Raleigh (No fee for Infill recombination)	<input checked="" type="checkbox"/>				
2. Preliminary Development Plan Application completed and signed by the property owner	<input checked="" type="checkbox"/>				
3. Client must complete and print page 1 and 2 of the Preliminary Development Plan Application to the plan cover sheet (not applicable for infill recombination)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
4. I have referenced the Preliminary Development Plan Checklist and by using this as a guide, it will ensure that I receive a complete and thorough first review by the City of Raleigh	<input checked="" type="checkbox"/>				
5. Provide the following plan sheets:	<input type="checkbox"/>				
a) Cover sheet: includes general notes, owner's name, contact's name, telephone number, mailing address and email address	<input checked="" type="checkbox"/>				
b) Existing Conditions Sheet	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
c) Proposed Site or Subdivision Plan	<input checked="" type="checkbox"/>				
d) Proposed Grading and Stormwater Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
e) Proposed Utility Plan, including Fire	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
f) Proposed Tree Conservation Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
g) Proposed Landscaping Plan (Landscape Plan not required for commercial subdivisions)	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
h) Building elevations that show maximum height from natural and finished grade, buildings to be removed	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
i) Transportation Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
6. Ten (10) sets of proposed plans to engineering scale (1" = 20', 1" = 100', etc.), and date of preparation. <u>For re-submittals only – include all revision dates</u>	<input checked="" type="checkbox"/>				
7. Plan size 18"x24" or 24"x36"	<input checked="" type="checkbox"/>				
8. A vicinity map no smaller/less than 1"=500' and no larger than 1"=1000' to the inch, showing the position of the subdivision with its relation to surrounding streets and properties, and oriented in the same direction as the preliminary plan	<input checked="" type="checkbox"/>				
9. Include sheet index and legend defining all symbols with true north arrow, with north being at the top of the map	<input checked="" type="checkbox"/>				
10. Digital copy of only the plan and elevations. Label the CD with the plan name, case file number, and indicate how many times the plan has been resubmitted for review	<input checked="" type="checkbox"/>				
11. Wake County School Form, if dwelling units are proposed	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
12. Preliminary stormwater quantity and quality summary and calculations package	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
13. For secondary tree conservation areas, include two (2) copies of the tree cover report completed by a certified arborist, North Carolina licensed landscape architect, or North Carolina registered forester	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

Primary i
 Comments
 + Reports on T.C.A. PLAN



Basal Area Calculations Date: 03.31.2014 (Revised: 05.09.2014)
(Refer to Ordinance TC-7-04 and User's Manual for instructions)

Project Name: GREENWAY VILLAGE PHASE II Total Site Acres: 15.337 Acres

Total TCA required (15% or more for RR, R2, 10% or more for all other zoning districts)
10% or more req'd = **1.53 ac**

PANEL:	1		
AREA:	65 LENGTH	65 WIDTH	0.10 ACRES
BA / TREE:	DBH	QTY	BA
	3	1	0.05
	4	1	0.09
	5	2	0.27
	6	1	0.20
	7	1	0.27
	22	1	2.64
	TOTAL TREE BA		3.51
BA / ACRE:	36		

Tree Conservation Plan Data Sheet Date: 04.03.2014 (Revised: 06.04.2014)
(Refer to Ordinance TC-7-04 and User's Manual for instructions)

Project Name: Greenway Village Phase II Total Site Acres: 15.337 Acres

Total TCA required (15% or more for RR, R2, 10% or more for all other zoning districts)
10% or more required = **1.53 ac**

	Number of Acres	Percent of Tract
(1) Primary Tree Conservation Areas		
(a1) SHOD 1 Yards	0.00	0.00%
(a2) SHOD 2 Yards	0.00	0.00%
(a3) SHOD 3 Yards	0.00	0.00%
(a4) SHOD 4 Yards	0.00	0.00%
(a5) Thoroughfare District Yards	0.00	0.00%
(a6) Conservation Management District	0.00	0.00%
(a7) Metro Park Overlay District	0.00	0.00%
(a8) Conditional Use Zoning Tree Save Areas	0.00	0.00%
(a9) Natural Protective Yards Required by Re-Zoning or Other Conditions	0.00	0.00%
(a10) Other Required Tree Save Areas	0.00	0.00%
(b) Champion Trees including their Critical Root Zones	0.00	0.00%
(c) Zone 2 of Neuse riparian buffers	0.11	0.72%
(d) Area with slopes of 45% or more adjacent to or within floodways	0.00	0.00%
Subtotal of Primary Tree Conservation Areas:	0.11	0.72%
Greenway Easement: (voluntarily inclusion of a portion of greenway)	1.29	8.41%
(2) Secondary Tree Conservation Areas		
(a) Major Thoroughfare: 50-foot Average Buffer	0.00	0.00%
(b) Minor Thoroughfare: 50-foot Average Buffer	0.00	0.00%
(c) 65-foot perimeter yard adjacent to non-vacant property	0.10	0.65%
(c) Alternate compliance area: 65-foot perimeter yard	0.00	0.00%
(d) 32-foot perimeter yard adjacent to vacant property	0.00	0.00%
(d) Alternate compliance area: 32-foot perimeter yard	0.00	0.00%
(e) Individual trees 10" dbh & larger within 65' of roadways or any non-vacant property	0.04	0.26%
(f) Individual trees 10" dbh & larger within 32' of any vacant property	0.00	0.00%
Subtotal of Secondary Tree Conservation Areas:	0.14	0.91%
TOTAL ALL TREE CONSERVATION AREAS:	1.54	10.04%

50 LF TREE LESS AREA IN NEUSE RIVER RIPARIAN BUFFER II NOTE:

- REFER TO ATTACHED 'GREENWAY VILLAGE - UPLAND PRIMARY TREE CONSERVATION AREA' FOR 50 LF TREE LESS AREA IN NEUSE RIPARIAN RIVER BUFFER ZONE 2.
- TREE LESS AREA IN NEUSE RIVER RIPARIAN BUFFER SHALL BE PLANTED WITH TWO SHADE TREES PER 50 LF, AND THOSE TREES SHALL BE AT LEAST TEN (10) GALLON CONTAINER SIZE, AT LEAST FIVE (5) FEET TALL, AND FREE OF CIRCLING ROOTS AT TIME OF PLANTING ACCORD WITH 10-2082.14.C

TREE CONSERVATION AREA LEGEND:

- PRIMARY TREE CONSERVATION AREA 20' NEUSE RIVER RIPARIAN BUFFER
- TREE LESS PRIMARY CONSERVATION AREA 20' WIDE NEUSE RIVER RIPARIAN BUFFER
- GREENWAY TREE CONSERVATION AREA
- SECONDARY TREE CONSERVATION AREA 65' WIDE PERIMETER YARD INDIVIDUAL TREES >10" DBH

SITE DATA:

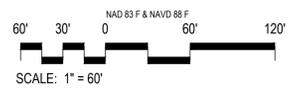
SITE ADDRESS: 3500 HORTON STREET, RALEIGH, NC 27607
PIN NUMBER: 0795.17211105
DEED BOOK: BOOK 13187 / PAGE 2686
ZONING(S): CUD R-15SHOD-1 OVERLAY
ACREAGE: 15.337 AC

XX-XX-14

TREE CONSERVATION PLAN



Know what's Below. Call before you dig.



WARNING SIGN DETAIL

THIS TREE PROTECTION FENCE DETAIL IS REQUIRED FOR PROTECTION OF TREE CONSERVATION AREAS (UDO ARTICLE 9.1, TREE CONSERVATION) AND FOR CREDIT OF EXISTING TREES (UDO SECTION 7.2.7.E.)

WARNING SIGN DETAIL

THIS TREE PROTECTION FENCE DETAIL IS REQUIRED FOR PROTECTION OF TREE CONSERVATION AREAS (UDO ARTICLE 9.1, TREE CONSERVATION) AND FOR CREDIT OF EXISTING TREES (UDO SECTION 7.2.7.E.)

NOTES:

- WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.
- LETTERS TO BE 2" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAIL.
- PLACE A SIGN AT EACH END OF NEAR TREE PROTECTION AND AT QUARTERS THEREAFTER.
- FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
- ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
- MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT.
- ADDITIONAL SIGNS MAY BE REQUIRED BY CITY OF RALEIGH BASED ON ACTUAL FIELD CONDITIONS.
- FLOW SHALL NOT RUN PARALLEL WITH THE FENCE.
- END OF ALL FENCE NEEDS TO BE TURNED UPFULL.
- SEE ALSO TREE CONSERVATION ENGINEER'S SPECIFICATIONS SEGMENT FENCE SET FOR CONDITIONS WHERE PRACTICE APPLIES.
- SEE ALSO TREE CONSERVATION ENGINEER'S SPECIFICATIONS SEGMENT FENCE SET FOR CONDITIONS WHERE PRACTICE APPLIES.
- PLANNING CONSIDERATIONS & DESIGN CRITERIA - FLOW SHALL NOT RUN PARALLEL WITH THE TOE OF THE FENCE.

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J DAVIS ARCHITECTS
510 Oldwood Ave. Suite 201 | Raleigh, NC 27603 | Tel: 919.835.1500 | Fax: 919.835.1510
XX-X-14
TRANSACTION NO: XX

Grubb Ventures
Greenway Village Subdivision
3500 Horton Street
Raleigh, North Carolina 27607

PRELIMINARY

FOR REVIEW ONLY
NOT FOR
CONSTRUCTION

PROJECT:	13037	DATE	02.2014
ISSUE:	Preliminary Subdivision		06.17.2014
REVISIONS:			
DRAWN BY:	NYJ		
CHECKED BY:	DB		
CONTENT:	TREE CONSERVATION PLAN		

L2.1

UTILITY KEY NOTES	
(A)	8"x8" TAPPING SLEEVE & VALVE
(B)	8" 45° BEND
(C)	8" 22.5° BEND
(D)	6" DIP FIRE LINE W/RPDA* IN RISER ROOM
(E)	FDC
(F)	FIRE HYDRANT ASSEMBLY
(G)	2" COPPER DOMESTIC SERVICE & WATER METER W/BPD* IN RISER ROOM
(H)	6" PVC SS SERVICE W/ CLEAN OUT
(I)	8" RPZ* IN HOT BOX

* SEE PROJECT NOTE #2 REGARDING BACKFLOW PREVENTION DEVICES.

STANDARD UTILITY NOTES:

- All materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications (reference: CORPUD Handbook, current edition)
- Utility separation requirements:
 - A distance of 100' shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified & installed to watertight specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well
 - When installing water &/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer & must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter
 - Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extended 10' on each side of crossing must be specified & installed to watertight specifications
 - 5.0' minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, unless DIP material is specified for sanitary sewer
 - Maintain 18" min. vertical separation at all watermain & RCP storm drain crossings; maintain 24" min. vertical separation at all sanitary sewer & RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete cradle having 6" min. clearance (per CORPUD details W-41 & S-49)
 - All other underground utilities shall cross water & sewer facilities with 18" min. vertical separation required
- Any necessary field revisions are subject to review & approval of an amended plan &/or profile by the City of Raleigh Public Utilities Department prior to construction
- Contractor shall maintain continuous water & sewer service to existing residences & businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24 hour advance notice to the City of Raleigh Public Utilities Department
- 3.0' minimum cover is required on all water mains & sewer force mains. 4.0' minimum cover is required on all reuse mains
- Install 3/2" copper* water services with meters located at ROW or within a 2'x2' Watertight Easement immediately adjacent
- Install 4" PVC* sewer services @ 1.0% minimum grade with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum
- Pressure reducing valves are required on all water services exceeding 80 psi; backwater valves are required on all sanitary sewer services having building drains lower than 1.0' above the next upstream manhole
- All environmental permits applicable to the project must be obtained from NCDWQ, USACE &/or FEMA for any riparian buffer, wetland &/or floodplain impacts (respectively) prior to construction
- NCDOT Encroachment Agreements are required for any utility work (including main extensions &/or service taps) within state ROW prior to construction
- Grease Interceptor / Oil Water Separator sizing calculations & installation specifications shall be approved by the CORPUD FOG Program Coordinator prior to issuance of a Building Permit. Contact Tim Beasley at (919)250-7825 or timothy.beasley@raleighnc.gov for more information
- Cross-connection control protection devices are required based on degree of health hazard involved as listed in Appendix-B of the Rules Governing Public Water Systems in North Carolina. These guidelines are the minimum requirements. The devices shall meet American Society of Sanitary Engineering (ASSE) standards or be on the University of Southern California approval list. The devices shall be installed and tested (both initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross-connection control program, whichever is more stringent

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH STANDARDS & SPECIFICATIONS. THE EXISTING UTILITIES SHOWN ON THE PLANS IS BASED ON THE BEST AVAILABLE INFORMATION, BUT CAN BE CONSIDERED ONLY AS APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS INFORMATION AND UTILITY LOCATIONS PRIOR TO COMMENCEMENT OF WORK ON SITE. ANY POTENTIAL CONFLICTS WITH PROPOSED CONSTRUCTION SHALL BE REPORTED TO THE PROJECT ENGINEER FOR REVIEW PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL CONTACT NC ONE-CALL AT 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION
- FIRE HYDRANTS SHALL BE PAINTED RED WITH HIGH REFLECTIVE SILVER CAPS AND BONNETS. THE CONTRACTOR SHALL NOTIFY THE CITY OF RALEIGH ENGINEERING DEPARTMENT AT 890-3030 TO SCHEDULE CONSTRUCTION INSPECTIONS.
- SANITARY SEWER AND WATER PIPE TRENCH EXCAVATION AND BACKFILLING SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF RALEIGH STANDARD SPECIFICATIONS.
- WATER AND SEWER SERVICE TIE-IN POINTS AND ELEVATIONS SHALL BE COORDINATED WITH THE PLUMBING PLANS.

UTILITY NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH STANDARD SPECIFICATIONS & DETAILS AND WITH ALL APPLICABLE BUILDING AND PLUMBING CODES INCLUDING BACKFLOW PROVISIONS.
- WHERE STATIC WATER PRESSURE EXCEEDS 80 PSI, A PRESSURE REDUCING VALVE MUST BE INSTALLED AS REQUIRED BY THE NORTH CAROLINA STATE BUILDING CODE. THE PRESSURE REDUCING VALVE WILL BE INSTALLED ON THE BUILDING SERVICE LINE AFTER THE METER.
- WATER SERVICE PIPE FOR 3/2" TO 2-INCH CONNECTIONS SHALL BE TYPE "K" SOFT COPPER WITH NO JOINTS OR COUPLINGS IN THE RIGHT-OF-WAY. THE FITTINGS SHALL BE FLARED COPPER TYPE BRASS FITTINGS OR COMPRESSION TYPE FITTINGS
- ALL METER BOXES SHALL BE CONSTRUCTED OF CAST IRON, PRECAST CONCRETE, CONCRETE BLOCK, OR CAST IN PLACE CONCRETE. SEE DETAIL DRAWINGS.
- CAST IRON, DIP OR PVC MAY BE USED FOR 4-INCH AND 6-INCH SANITARY SEWER SERVICE CONNECTIONS. THE MINIMUM SLOPE FOR 4-INCH AND FOR 6-INCH IS 1/8" PER FOOT (1%). THE ENDS OF THE LATERALS WILL BE PLUGGED WATER/AIR TIGHT. CLEANOUTS SHALL BE PROVIDED AS SHOWN ON THE PLANS, BUT SHALL NOT BE SPACED GREATER THAN 75 FEET FOR 4-INCH LINES AND 100 FEET FOR 6-INCH LINES. A CLEANOUT SHALL BE LOCATED AT THE EASEMENT OR RIGHT-OF-WAY LINE AND MUST BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR, IF CONSTRUCTED OF PVC, MUST BE EQUIPPED WITH A BRONZE CLEAN-OUT PLUG TO FACILITATE LOCATION IF BURIED.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF RALEIGH ENGINEERING DEPARTMENT AT 890-3030 TO SCHEDULE CONSTRUCTION INSPECTIONS.

HORIZONTAL RELATION OF WATER MAINS TO SEWERS
 WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS. UNLESS THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

VERTICAL RELATION OF WATER MAINS TO SEWERS
 WHENEVER A WATER MAIN CROSSES OVER A SEWER, THE WATER MAIN SHALL BE LAID WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE SEWER. UNLESS BOTH THE WATER MAIN AND SEWER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE CROSSING.

WHENEVER A WATER MAIN CROSSES UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE CROSSING AND MAINTAIN A MINIMUM OF 18 INCH VERTICAL SEPARATION. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.

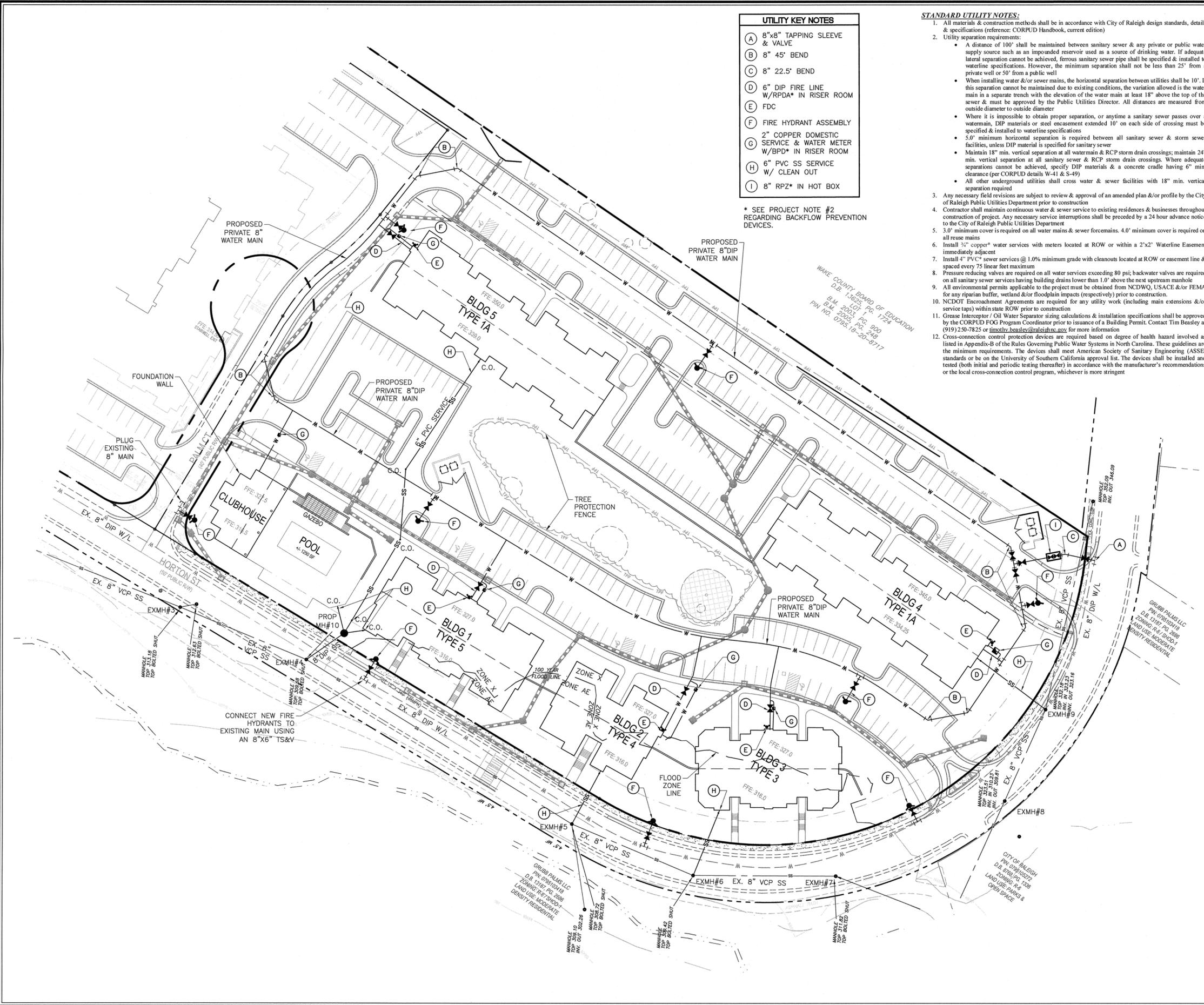
VERTICAL RELATION OF SANITARY SEWER MAINS & WATER MAINS TO STORM SEWER
 WHENEVER A SANITARY SEWER OR WATER MAIN IS CROSSING OVER OR UNDER A STORM SEWER, A VERTICAL SEPARATION OF 24 INCHES SHALL BE MAINTAINED, UNLESS BOTH LINES ARE OF DUCTILE IRON OR ENCASED IN CONCRETE.

NOTE TO CONTRACTOR

- CONTRACTOR TO COORDINATE ALL UTILITY CONNECTIONS WITH THE APPROPRIATE AGENCY, PROVIDER OR OTHER PERTINENT ENTITY.
- ALL SANITARY SEWER CLEANOUTS IN PAVEMENT SHALL BE TRAFFIC RATED (H-20).
- THE CONTRACTOR SHALL SUPPLY THE FOOTING, FOUNDATION, CONDUITS AND CONDUCTORS FOR THE SIGN. SEE THE APPROVED SIGN PLANS FOR SPECIFICS.

PROJECT NOTES

- ALL FIRE HYDRANTS LOCATED ALONG THE PUBLIC STREET SHALL BE LOCATED BEHIND THE SIDEWALK IN A2'x2' CORPUS EASEMENT
- BUILDING DOMESTIC BACKFLOW PREVENTION DEVICES WILL BE LOCATED INSIDE THE RISER ROOMS ALONG WITH THE FIRE LINE DCCV'S. ALL MODELS SHALL COMPLY WITH THE APPROVED LIST AS SET FORTH IN THE CORPUS HANDBOOK.
- ALL EXISTING UTILITIES SHALL BE ABANDONED AT THE TAPS (MAIN) AND BE REMOVED FROM THE RIGHT OF WAY OR EASEMENT.
- ALL SANITARY SEWER SERVICES SHALL BE 6" PVC WITH A MINIMUM SLOPE OF 1.0%.
- THE SWIMMING POOL DISCHARGE SHALL BE LIMITED TO 50 GPM.
- ALL REMAINING DETAILS OF THE WATER AND SEWER SYSTEM SHALL BE ADDRESSED DURING CONSTRUCTION PLAN REVIEW.



K:\13-0000\130006-1-Palms # Apartments\CAD\SITE PLAN SHEETS\22.0 - UTILITY.dwg - Friday, June 06, 2014 8:58:53 AM - PLOTTS, LDDH

No.	Revision	Date	By
1	PER REVIEW COMMENTS	06/05/14	ALP

Designer	ALP	Scale	1"=50'
Drawn By	ALP	Date	04/02/14
Checked By	LGS	Job No.	02130086.10

GREENWAY VILLAGE PHASE II

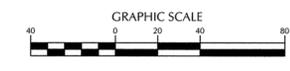
City of Raleigh Wake County North Carolina

UTILITY PLAN

WITHERS & RAVENEL
 ENGINEERS | PLANNERS | SURVEYORS

Sheet No. **C2.0**

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ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF RALEIGH STANDARDS & SPECIFICATIONS